REMARKS

Claims 1, 7, 9, 17, 21, 28, 31, 36, 44, 46, 52, 58, 62, and 72 are amended. Claims 1, 3-11, 17-31, 34-48, 51, 52, 55-58, 61-62, 66, 67, 72, and 73 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Finality of the Action:

The present Action includes a new ground of rejection of claim 44 under 35 U.S.C. § 112, second paragraph, in regard to the word "extremely." During a telephone call on March 2, 2010, Applicants' representative pointed out to Examiner Anya that the word "extremely" was not added by amendment and therefore this rejection is a new ground of rejection not necessitated by amendment. Thus, according to MPEP 706.07(a), the present action should not have been made final. Examiner Anya agreed that the present action should be treated as a non-final action. Accordingly, the above amendments should be entered.

Claim Objections:

The Office Action objected to Applicants' remark/argument including the cancellation of claims 36-40 and 42 and pages 8-9 indicating otherwise. In response, Applicants assert that claims 36-40 and 42 are not cancelled.

The Office Action objected to claims 46 and 72 due to typographical errors in those claims. Applicants have corrected the noted errors.

Removal of the objections is respectfully requested.

Section 112, Second Paragraph, Rejection:

The Office Action rejected claims 44 under 35 U.S.C. § 112, second paragraph, as indefinite. Claim 44 is amended to remove the term "extremely". Accordingly, removal of the rejection on this ground is respectfully requested.

Section 112, First Paragraph, Rejection:

The Office Action rejected claim 28-30 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. While Applicants respectfully traverse this rejection, claim 28 is amended to remove the limitation in question. Accordingly, removal of the rejection on this ground is respectfully requested.

Section 103(a) Rejections:

The Office Action rejected claims 1, 3, 6, 24, 31, 35, 36, 42-44, 46-48, 52, 55, 57, 58, 61, 62, 66 and 67 under 35 U.S.C. § 103(a) as being unpatentable over Burrows et al. (U.S. Patent 6,662,364) (hereinafter "Burrows") in view of Mittal (U.S. Patent 5,860,126), claims 4, 5, 7, 25, 26, 34 and 37-41 as being unpatentable over Burrows in view of Mittal and further in view of Bacon et al. (U.S. Patent 6,772,153) (hereinafter "Bacon"), claims 8, 11, 17, 18, 51 and 56 as being unpatentable over Burrows in view of Mittal and further in view of Chaudhry et al. (U.S. Patent 6,430,649) (hereinafter "Chaudhry"), claims 9 and 10 as being unpatentable over Burrows in view of Mittal and further in view of Chaudhry and Mckenney (U.S. Patent 7,398,376), claim 19 as being unpatentable over Burrows in view of Mittal and further in view of Chaudhry and Boatright et al. (U.S. Patent 6,678,807) (hereinafter "Boatright"), claims 20 and 21 as being unpatentable over Burrows in view of Mittal and further in view of Scott (U.S. Patent 6,965,961), claim 22 as being unpatentable over Burrows in view of Mittal and further in view of Govindaraju et al. (U.S. Patent 6,112,222) (hereinafter "Govindaraju"), claim 23 as being unpatentable over Burrows in view of Mittal and further in view of Azagury et al. (U.S. Patent 6,757,891) (hereinafter "Azagury"), claim 27 as being

unpatentable over Burrows in view of Mittal and further in view of Nilsen et al. (U.S. Patent 6,081,665) (hereinafter "Nilsen"), claims 28-30 as being unpatentable over Burrows in view of Mittal and further in view of Onodera (U.S. Publication 2001/0014905), and claims 45, 72 and 73 as being unpatentable over Burrows in view of Mittal and further in view of Dimpsey et al. (U.S. Patent 6,792,601) (hereinafter "Dimpsey"). Applicants respectfully traverse these rejections for at least the following reasons.

Regarding claim 1, the combined cited art does not teach that "the biasable lock includes a quick-lock field" and that "the acquisition sequence [of the bias-holding thread] comprises storing a value in the quick lock field, the value indicating that the biasable lock is held by the bias-holding thread; and subsequent to said storing, determining whether the biasable lock is still biased to the bias-holding thread, wherein the acquisition sequence completes successfully and free of atomic read-modify-write operations only if the biasable lock is determined to still be biased to the bias-holding thread," as recited in claim 1. Support for this limitation may be found in FIG. 2 and throughout the specification.

Burrows discloses that "when said requesting thread is the thread associated with said target mutex, said request to acquire said target mutex is granted without using atomic machine instructions" (col. 10, lines 8-11). However, Burrows is completely silent regarding what steps constitute granting the target mutex without atomic machine instructions. For example, FIG. 2 of Burrows depicts the affirmative exit from 240 as a direct line to "Grant request and return," and does not disclose any additional steps. Therefore, Burrows does not teach what is claimed.

Burrows does not teach the limitations of setting a quick-lock field and subsequently confirming that the bias-holding thread still holds the bias. Furthermore, none of the other cited art teaches such a procedure, whether considered alone or in combination.

Mittal teaches lock and release sequences (Memory Fence Directional-Acquire and Memory Fence Directional-Release) that rely on memory fence (i.e., memory barrier) operations that prevent certain instruction-reordering operations. This does not teach the particular lock acquisition steps of claim 1. Chaudhry simply teaches a technique for enforcing dependencies between memory references and also does not teach a lock acquisition sequence such as the one recited in claim 1. Therefore, neither Burrow, nor Mittal, nor Chaudhry, nor any combination thereof, teach the recited limitations of claim 1.

For at least the reasons presented above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested. Similar remarks as those above regarding claim 1 also apply to claims 31, 36, 46, 52, 58, 62, and 72.

Moreover, Applicants assert that the rejections of numerous ones of the dependent claims are further unsupported by the cited art. However, since the rejection of the independent claims has been shown to be unsupported, Applicants will forego a further discussion of the rejections of the dependent claims at this time.

In light of the foregoing amendments and remarks, Applicants submit that all pending claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. If a phone interview would speed allowance of any pending claims, such is requested at the Examiner's convenience.

CONCLUSION

Applicants submit the application is in condition for allowance, and an early notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/6000-32500/RCK.

Respectfully submitted,

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